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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,083	07/14/2003	Jeffrey W. Adair	03067/02006	4661
43215	7590	11/24/2004	EXAMINER	
BORGWARNER INC. PATENT DEPARTMENT 3800 AUTOMATION AVE AUBURN HILLS, MI 48326-1782			BONCK, RODNEY H	
			ART UNIT	PAPER NUMBER
			3681	
DATE MAILED: 11/24/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/619,083	Applicant(s) ADAIR ET AL.	
	Examiner Rodney H. Bonck	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004 and 07 October 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to the amendments received August 11, 2004 and October 7, 2004.

Drawings

The replacement sheets of drawings were received on August 11, 2004. These drawings are acceptable. The previous objection to the drawings is withdrawn.

Specification

The amendments to pages 9 and 12 of the specification overcome the previous objection to the disclosure. That objection is withdrawn.

In view of amendments to claims 5, 12, and 25, the following objection is deemed necessary:

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The claims have been amended to recite that the desired number of oil localization slots is determined by dividing 360° by a desired number of connected sections. The specification (e.g., at page 9, line 5) still refers to dividing 360 by the "amount of space between adjacent slots".

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5, 12, and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification now states that the number of slots is determined by dividing 360° by "a desired number of connected sections". The result of this equation would appear to be the number of degrees in each connected section rather than the number of oil localization.

Claims 5, 12, 25, and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims appear to be inaccurate in stating that the number of slots is determined by dividing 360° by "a desired number of connected sections". The result of this equation would appear to be the number of degrees in each connected section rather than the number of oil localization. Regarding claim 35, the phrase "and the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "and the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collis et al.(US 2003/0047411 A1) in view of Kremsmair et al.('649). Noting particularly Figs. 17-23 of Collis et al., there is disclosed a friction material 10 having a plurality of connected sections 218, each section being defined by adjacent oil localization slots 220 in the friction material. The slots have opposing sides that define a reservoir that retains fluid. (See especially paragraphs [103] and [106] of Collis et al.) The slots have a retention side and a wiping side, 222,223, which also define opposing and converging sides. The sides extend at an angle to the edge of the friction material and define an

offset distance that can be measured at any point along the edge length. If a distance across section 230 of the slot is designated D1 and the distance across the mouth of the section 230 is designated D2, then D2 is clearly shorter than D1. The Collis et al. device is disclosed for use with an end use product. Collis et al. discloses the claimed method of positioning and applying friction material on a friction member and discloses the use of adhesive and heating the product under pressure. See paragraphs [0132] to [0164] of Collis et al. The Collis et al. device shows a single set of oil localization slots radiating from an inner edge of the friction material. The claims now call for a first set of slots radiating from an inner edge of the friction material and a second set of slots radiating from an outer edge of the friction material. The Kremsmair et al. device shows a friction lining 2 where two sets of oil slots 5 are provided, one radiating from the inner periphery and one radiating from the outer periphery. It would have been obvious to similarly provide two sets of slots in the Collis et al. device, the motivation being to provide enhanced cooling and/or lubrication of the friction member. In Collis et al. the angular extent of the section connecting adjacent slots is determined by dividing 360° by the desired number of slots. A person having ordinary skill in this art would have recognized that it would logically follow that the number of slots could be determined by dividing 360° by the desired angular extend of the connecting sections. Thus the relationship claimed here is seen as obvious within the meaning of 35 USC 103. Regarding claims 3, 4, 16, and 17, describing the shape of the slots as being "substantially tear drop shape" or "substantially dovetail shape", is not seen to patentably distinguish over Collis et al. Collis et al. disclose a slot having reservoir

section 230 and narrow entry section 224 (see Fig. 19) which can be considered to be a general dovetail or tear drop shape, or at least the terms "tear drop" and "dovetail" do not describe a shape in sufficient detail to distinguish over the shape disclosed by Collis et al. As can be seen in Kremsmair et al. (e.g., Fig. 4), each slot terminates a desired distance from the edge of the friction material. This distance for each slot extends beyond the corresponding distance of the adjacent slot. The slot apex can be seen to be one of rounded, circular, oval, or elliptical.

Response to Arguments

Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

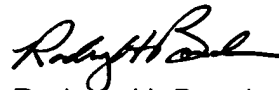
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (703)-308-2904. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703)-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck
Primary Examiner
Art Unit 3681

rhb

November 22, 2004